DOCKET NO. 50277-0005

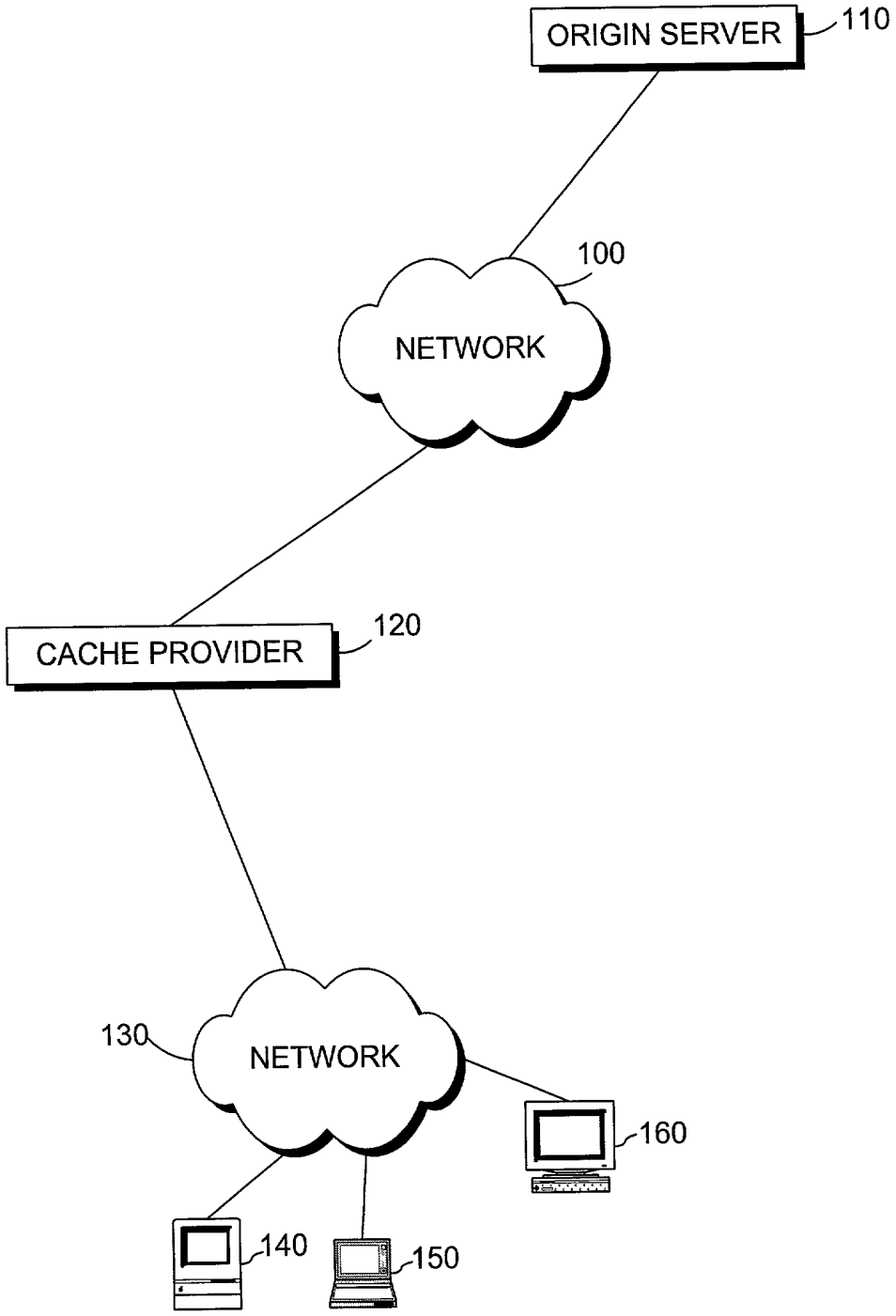

Fig. 1A

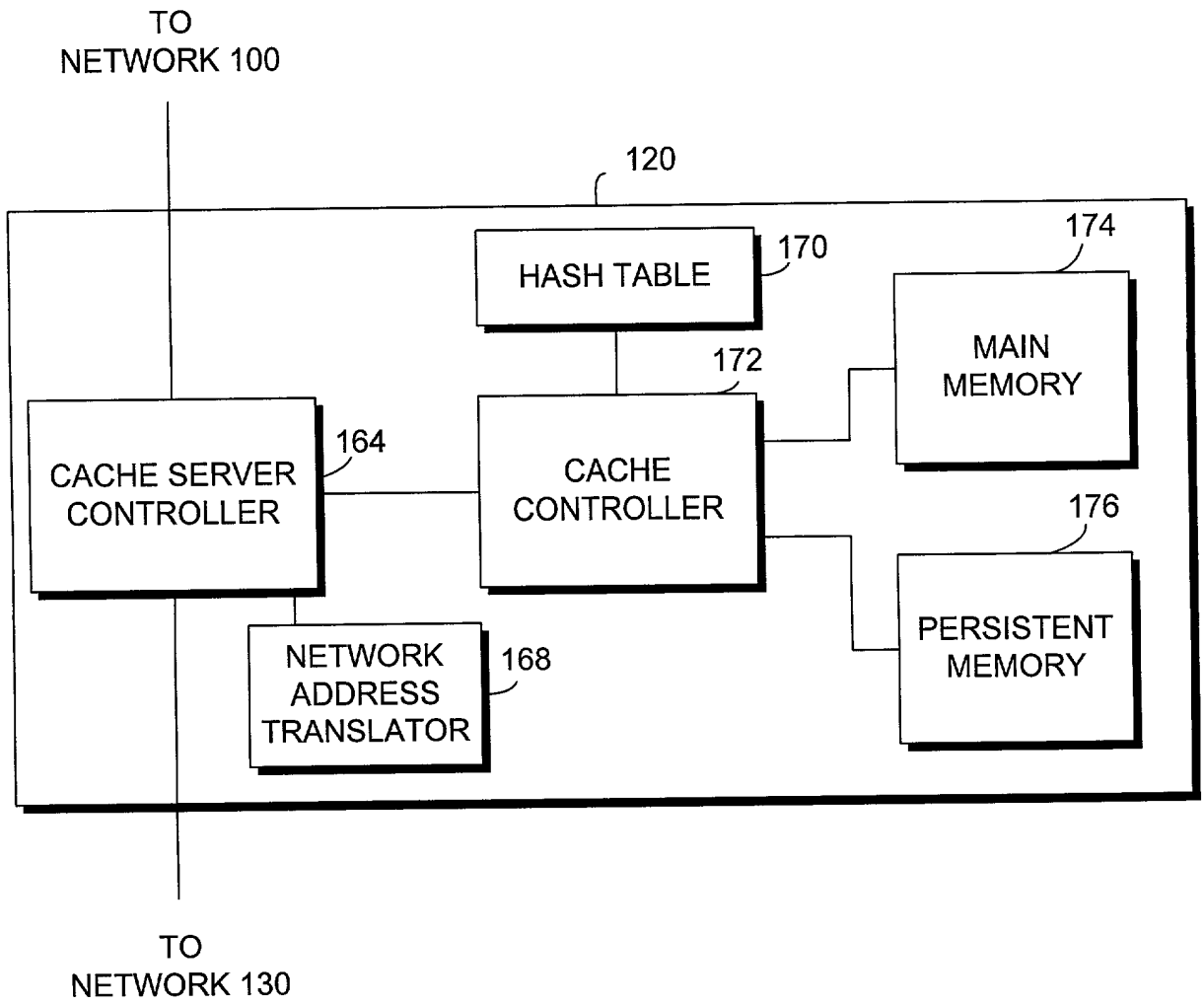
TO
NETWORK 100
120
HASH TABLE
170
174
MAIN
MEMORY
172
CACHE SERVER
CONTROLLER
164
CACHE
CONTROLLER
176
PERSISTENT
MEMORY
NETWORK
ADDRESS
TRANSLATOR
168
TO
NETWORK 130

Fig. 1B

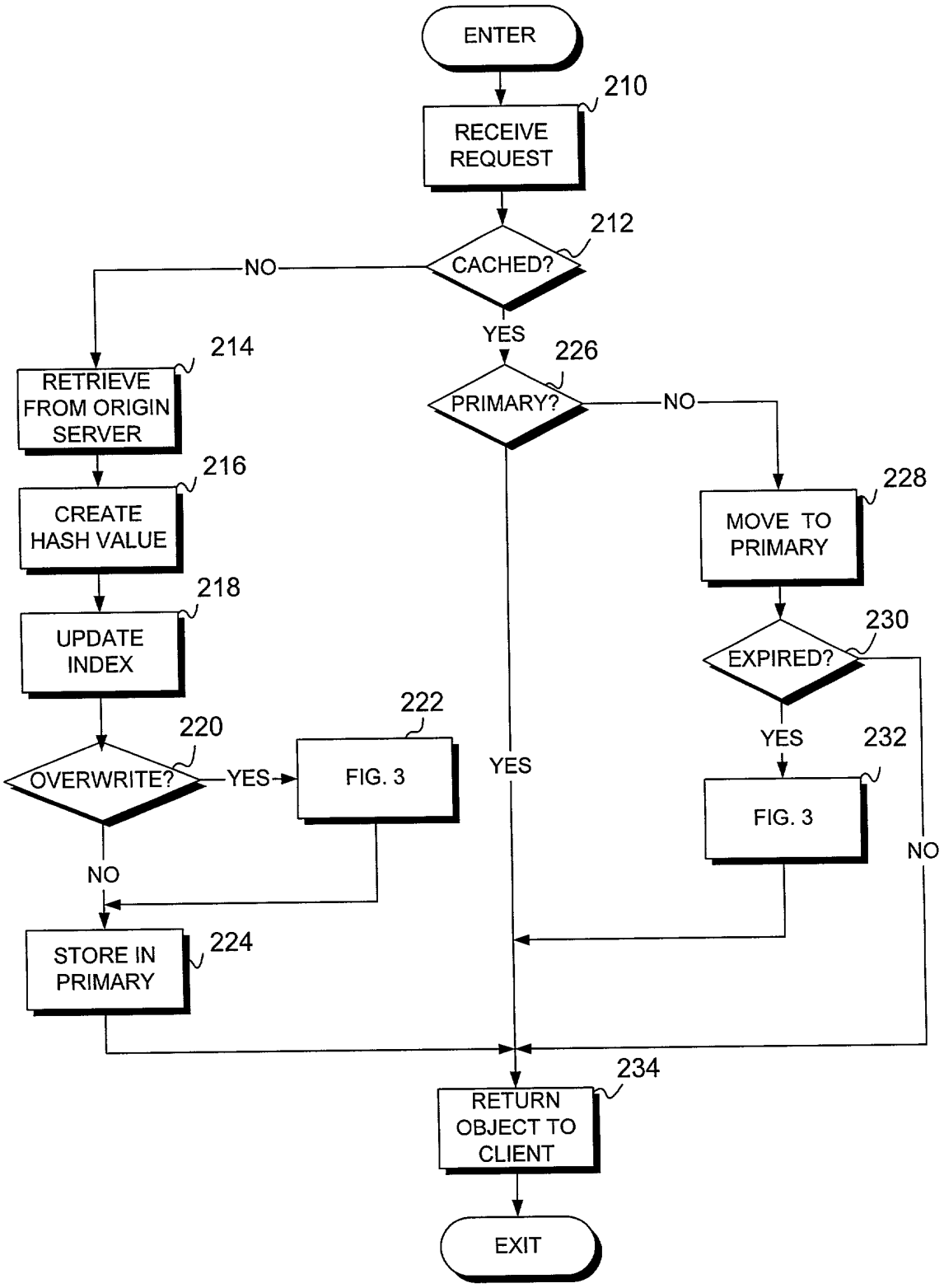
ENTER
210
RECEIVE REQUEST
212
CACHED?
NO
YES
214
RETRIEVE FROM ORIGIN SERVER
216
CREATE HASH VALUE
218
UPDATE INDEX
220
OVERWRITE?
YES
222
FIG. 3
NO
224
STORE IN PRIMARY
226
PRIMARY?
NO
YES
228
MOVE TO PRIMARY
230
EXPIRED?
YES
232
FIG. 3
NO
234
RETURN OBJECT TO CLIENT
EXIT

Fig. 2

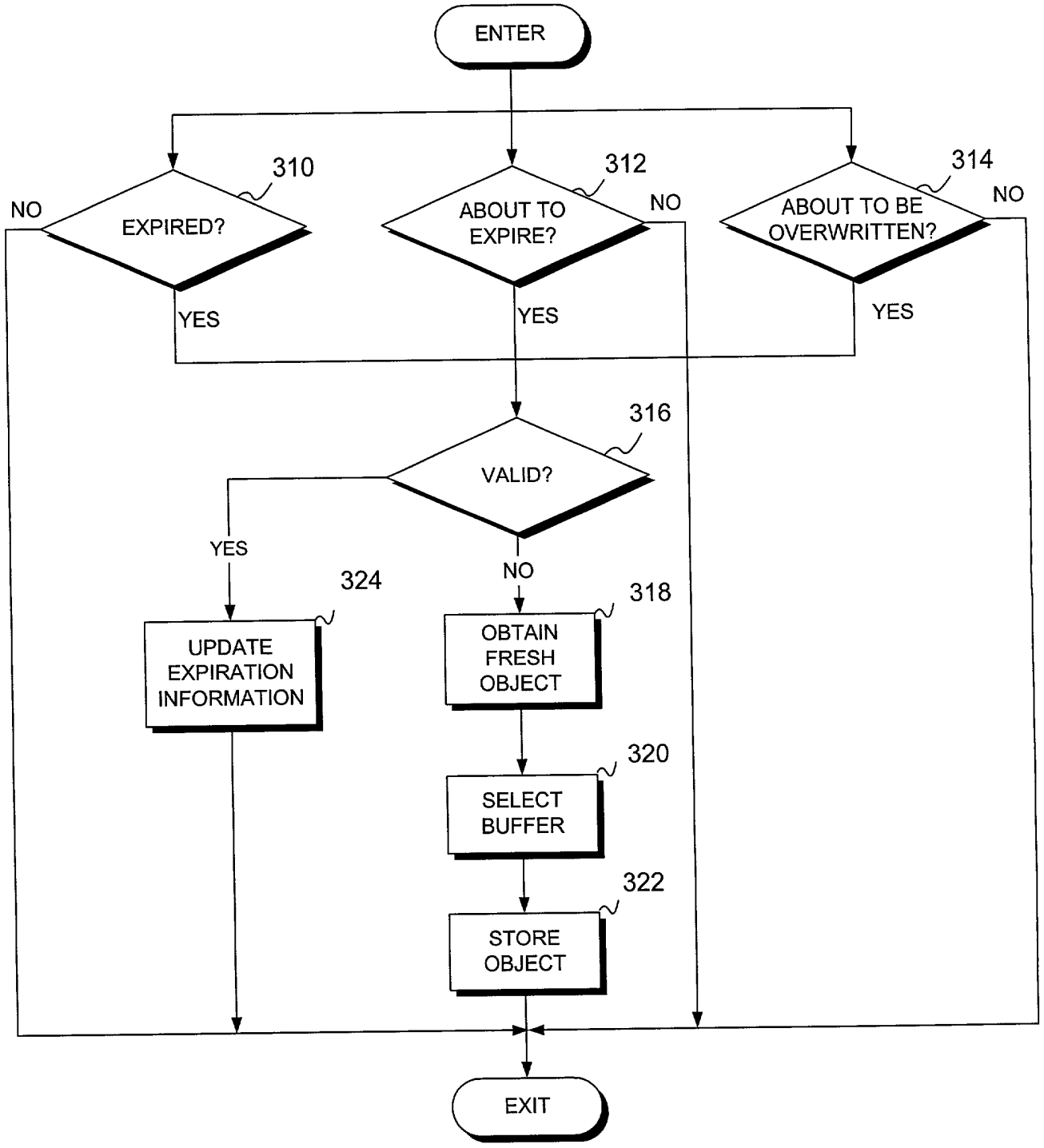
ENTER
310
EXPIRED?
NO
YES
312
ABOUT TO EXPIRE?
NO
YES
314
ABOUT TO BE OVERWRITTEN?
NO
YES
316
VALID?
YES
NO
324
UPDATE EXPIRATION INFORMATION
318
OBTAIN FRESH OBJECT
320
SELECT BUFFER
322
STORE OBJECT
EXIT

Fig. 3

410

WEB OBJECT URL	EXPIRE DATE
HTTP://www.xyz.com	6-14-99
HTTP://www.lmn.com	6-14-99
HTTP://www.stu.com	6-14-99
HTTP://www.def.com	6-14-99
HTTP://www.zzz.com/fgh	6-15-99
HTTP://www.pqr.com	6-15-99
HTTP://www.mmm.com	6-15-99
HTTP://www.ijk.com	6-16-99
HTTP://www.bbb.com	6-16-99
HTTP://www.uvw.com	6-16-99
HTTP://www.bbb.com/here	6-17-99
HTTP://www.eee.com/123	6-17-99
HTTP://www.rrr.com	6-17-99

Fig. 4

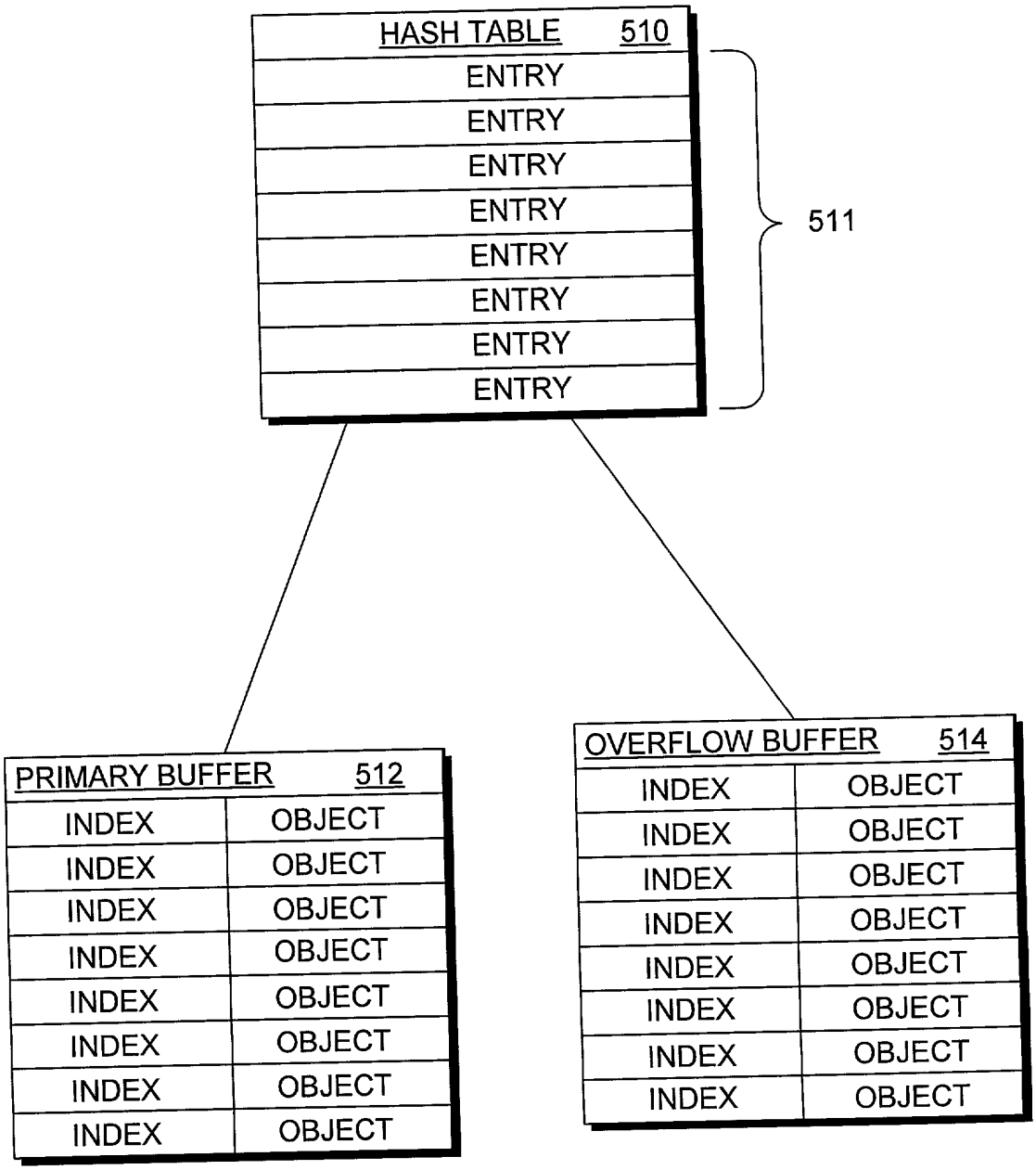
HASH TABLE 510
ENTRY
ENTRY
ENTRY
ENTRY
ENTRY
ENTRY
ENTRY
ENTRY
511
PRIMARY BUFFER 512
INDEX OBJECT
INDEX OBJECT
INDEX OBJECT
INDEX OBJECT
INDEX OBJECT
INDEX OBJECT
INDEX OBJECT
INDEX OBJECT
OVERFLOW BUFFER 514
INDEX OBJECT
INDEX OBJECT
INDEX OBJECT
INDEX OBJECT
INDEX OBJECT
INDEX OBJECT
INDEX OBJECT
INDEX OBJECT

Fig. 5

EXPRESS MAIL NO. EV 339 174 905 US

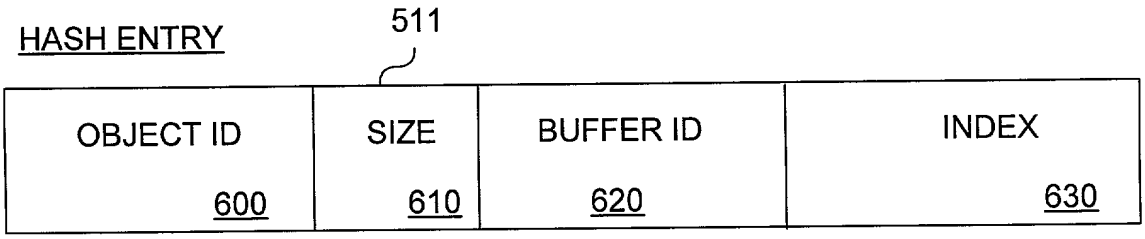

Fig. 6